

# Key Stage 1 – Subtraction

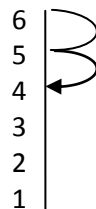
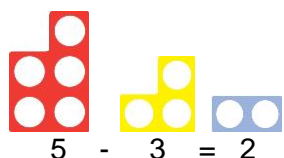
**Y1**

Through practical and meaningful contexts and informal written methods.

- We made 6 cakes. We ate 2 of them. How many cakes are left?



- Link to vertical number line  $6 - 2 =$



- Find the difference within 20.
- Represent and use number bonds within 20.
- Record using subtraction (-) and equals signs (=)
- Derive related facts up to 20.

$$\begin{array}{ll} 5 - 2 = \square & \square = 5 - 2 \\ 5 - \square = 3 & 3 = \square - 2 \\ \square - 2 = 3 & 3 = 5 - \square \\ \square - \square = 3 & 3 = \square - \square \end{array}$$



- Counting back on a 100 square and a vertical number line.

## National Curriculum requirements:

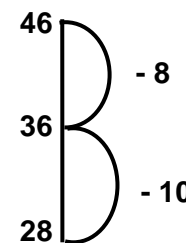
Subtract 1 digit and 2 digit numbers up to 20, including 0.  
Represent and use number bonds and related subtraction facts.

**Y2**

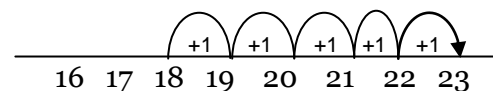
Through practical and meaningful contexts.

- Fluent recall of bonds to 20 and within 20.
- Derive and use related facts up to 100  
e.g.  $10 - 7 = 3$  so  $100 - 70 = 30$ .
- Counting back by partitioning second number. Subtract the ones first to be in line with columnar subtraction

E.g.  $46 - 18$   
 $46 - 10 - 8$



- Find the difference by counting up (only when the difference is small).  
 $23 - 18 = 5$



- Recognise and use the inverse relationship between addition and subtraction
- Show that subtraction is not commutative (done in any order)
- Progressing to the partitioned columnar method in preparation for year 3
- Subtraction of money, including change.

## National Curriculum requirements:

(using concrete objects, pictorial representations and mentally)

Subtract 2 digit numbers and ones.

Subtract 2 digit number and tens.

Subtract two 2 digit numbers.

Subtract three 1 digit numbers.

## Key Stage 2 – Subtraction

### Y3

- Continue with vertical number line subtraction progressing to the expanded columnar subtraction method.

$$89 - 35 = 54$$

$$\begin{array}{r} 80 + 9 \\ - 30 + 5 \\ \hline 50 + 4 = 54 \end{array}$$

- Introduce exchanging through the expanded columnar subtraction method.

$$72 - 47$$



$$\begin{array}{r} 60 \\ \cancel{70} + 12 \\ - 40 + 7 \\ \hline 20 + 5 = 25 \end{array}$$

- Progressing on to compact columnar subtraction.

$\begin{array}{r} \text{T O} \\ 47 \\ - 23 \\ \hline 24 \end{array}$	$\begin{array}{r} \text{H T O} \\ 864 \\ - 621 \\ \hline 243 \end{array}$	$\begin{array}{r} \text{T O} \\ 451 \\ - 36 \\ \hline 15 \end{array}$
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- Emphasise value of digit, e.g. 4 tens subtract 2 tens = 2 tens. Use the correct language for subtraction i.e. exchange rather than borrow.
- Subtract amounts of money to give change.

#### Video clips:

[Subtraction - teaching children to consider the most appropriate methods before calculating](#)

[Introducing partitioned column subtraction method, from practical to written](#)

#### National Curriculum requirements:

Subtract numbers with up to 3 digits using the formal written method of columnar subtraction.

### Y4

- Continue with partitioned columnar subtraction progressing to compact columnar subtraction.

$\begin{array}{r} \text{H T O} \\ \cancel{3}^3 \cancel{4}^1 37 \\ - 182 \\ \hline 255 \end{array}$	$\begin{array}{r} \text{H T O} \\ \cancel{3}^3 \cancel{4}^{12} \cancel{2}^1 12 \\ - 187 \\ \hline 245 \end{array}$	$\begin{array}{r} \text{H T O} \\ \cancel{5}^5 \cancel{6}^9 \cancel{0}^1 14 \\ - 347 \\ \hline 257 \end{array}$	$\begin{array}{r} \text{Th H T O} \\ 8 \cancel{3}^3 \cancel{4}^{11} \cancel{2}^1 16 \\ - 2177 \\ \hline 6249 \end{array}$
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- Estimate and use inverse operations to check answers to a calculation.
- Subtract amounts of money using columnar method.

#### Video clips:

[Subtraction - teaching children to consider the most appropriate methods before calculating](#)

[Introducing partitioned column subtraction method, from practical to written](#)

[Moving to the compact column method of subtraction](#)

#### National Curriculum requirements:

Subtract numbers up to 4 digits using the formal written method of columnar subtraction.

## Key Stage 2 – Subtraction

### Y5

- Continue with compact columnar subtraction, including subtraction of decimals.

$$\begin{array}{r}
 \overset{2}{\cancel{3}} \overset{10}{\cancel{10}} \overset{4}{\cancel{8}} \overset{16}{\cancel{16}} \\
 - \quad 2128 \\
 \hline
 28,928
 \end{array}$$

$$\begin{array}{r}
 \overset{6}{\cancel{7}} \overset{10}{\cancel{16}} \overset{8}{\cancel{9}} \overset{10}{\cancel{10}} \\
 - \quad 372.5 \\
 \hline
 6796.5
 \end{array}$$

- Use rounding to check answers to calculations and to determine, in the context of a problem, levels of accuracy.

Video clip:

[Moving to the compact column method of subtraction](#)

**National Curriculum requirements:**

Subtract numbers with more than 4 digits.

### Y6

- Continue with compact columnar subtraction, including subtraction of decimals.

$$\begin{array}{r}
 \overset{0}{\cancel{10}} \overset{14}{\cancel{10}} \overset{9}{\cancel{10}} \overset{16}{\cancel{16}} \overset{9}{\cancel{9}} \\
 - \quad 89,949 \\
 \hline
 60,750
 \end{array}$$

$$\begin{array}{r}
 \overset{1}{\cancel{10}} \overset{15}{\cancel{15}} \cdot \overset{3}{\cancel{4}} \overset{11}{\cancel{11}} \overset{9}{\cancel{9}} \text{ kg} \\
 - \quad 36 \cdot 08 \text{ kg} \\
 \hline
 69 \cdot 339 \text{ kg}
 \end{array}$$

- Use estimation to check answers to calculations and to determine, in the context of a problem, levels of accuracy.

**National Curriculum requirements:**

Subtract numbers with more than 4 digits.